California's Grape Industry

BULLETIN No. 13



State Board of Viticultural Commissioners

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BULLETIN No. 13



BY THE STATE BOARD OF VITICULTURAL COMMISSIONERS SACRAMENTO, CALIFORNIA

MARCH 1, 1919

This bulletin is issued primarily for the purpose of giving authentic information relating to the grape harvest and its products during the season of 1918.

The gathering of statistics was delayed because of somewhat unusual weather conditions affecting particularly the raisin production. Because of storms during the drying season for raisins much damage was done and much attention was paid to the matter of salvaging a very considerable proportion of the Muscat raisin crop. This effort meant that raisins were allowed to remain on the trays and in the sweat boxes until very late in the fall and the collection of these particular statistics had to be postponed until very recently.

It should be stated in a general way in prefacing this bulletin that troubles were encountered by the producers in all three branches of the viticultural industry: namely, table, wine and raisin grapes. Several untimely rainsforms occurred during the harvest of the table grapes and much tonnage that would otherwise have been packed and shipped as table grapes was not marketed as such and many carload shipments of table grapes sent out of the state were forwarded in small lug boxes instead of the usual crates and baskets. At the selling end it was difficult to ascertain with any degree of accuracy what proportion of the table grapes was bought for eating purposes and what number of crates was purchased for conversion into wine.

Shortage of shook. There was a shortage of table grape crates and baskets and much of the crop was loaded into refrigerator cars in lug box form. The grapes carried well under icing conditions, and, generally speaking, the returns to the growers were remunerative to a very

considerable degree. In a number of concrete instances, however, the grapes spoiled before they reached destination because of transportation delay due to priority rights that were required over the various railroads in the shipping of war munitions, etc. In such instances the grapes arrived at destination in soft and unmarketable condition but there was no trouble in selling them at profitable figures for wine-making purposes.

Raisin conditions. The production of raisins was considerably larger than ever before in the history of the industry in California. This was due to the tremendous crop in the Fresno and Tulare sections and in spite of the fact that the production in Sutter County in the northern part of the state was scarcely twenty-five per cent of normal. Frost early in the year did a great deal of damage to the vines and curtailed the setting of the fruit. Rains in the early fall did additional damage and the northern raisin section found its production reduced to but a small percentage of the usual crop.

Quality of raisins. In connection with the statement that the raisin crop exceeded all former years, it should be said that the great tonnage was composed of several classes and grades of raisins, including much damaged stock. The Muscat variety suffered most from the rains because they were on the trays and in the field in the sweat boxes when the storms came early in October. There was no chance of salvage through the wineries locally because federal regulations prevented the manufacture of commercial brandy and even fortifying brandy was limited in production because of the very small sweet wine output and the large government tax attached to its production and sale. Raisin growers, therefore, devoted their time to either drying artificially or to turning the raisins on the trays frequently in an endeavor to prevent the molding and rotting of the Muscat raisins. To a considerable extent they were successful, but after the raisins were delivered to the packing houses there was much more work to be done in the way of grading. and even at the present writing this is not finished.

Luckily, California raisins of both good and poor grades have had their own way in the United States market and no matter what the damage was the prices were high and the goods were eagerly bought at prices that yielded handsome profits to the growers.

Conditions surrounding wine grape crop. The wine grape crop throughout the state brought unheard-of prices, and when the grower thought he was not receiving high enough figures locally he had an epportunity of dealing with brokers and dealers who represented Eastern purchase sources. A very considerable proportion of the wine grape crop was moved out of California to other states of the Union where it was converted into wine. We estimate the number of cars of wine grapes so transported to have been 6,000 cars, and prices realized

by the shippers probably averaged to them at the shipping point \$35 per ton. In localities where wine grapes were under contract the purchaser eventually raised the contract price from whatever it might have been to a figure of \$22.50 per ton and from that point upward. Sales to the local wineries ranged from \$25 per ton in sweet wine districts to \$50 per ton in dry wine districts. The California production of wine, however, was curtailed because of the probable approach of federal war-time prohibition and the sweet wine output was less than one-fourth of the normal amount manufactured annually. Dry wine production almost equalled the normal, but this was due to the fact that many of the sweet wine wineries decided to convert their entire crop of grapes into dry wine on account of the large federal tax required in the production and in the marketing of sweet wines and because of fear on the part of the producers that the high selling price of sweet wine might act by way of curtailment of the sale.

At the time of issuance of this bulletin war-time prohibition of the manufacture of wine is in effect to all intents and purposes, even though the date of the prohibition of manufacture is May 1 of this year. Prohibition of the sale of wine for beverage purposes (except for export) will be in effect on July 1 of this year and until such time as demobilization of the troops shall have been proclaimed by the President of the United States. The date on which such proclamation may be made is problematical. If it should occur at any time between the present and the opening of the vintage season next September the wine grapes of California could be crushed and made into wine and sold up to the time that national prohibition under the Sheppard amendment to the federal constitution takes effect. This date, according to the proclamation issued by Acting Secretary of State Polk, is January 16, 1920. If that date stands against legal contentions which will be made to overthrow it, as well as to overthrow the war-time prohibition bill, the nation will be under a prohibition law after January 16, 1920, and use of all forms of alcoholic beverages will be prohibited.

The news comes during the preparation and publication of this bulletin that concerted legal action is to be started in many of the states of the Union looking toward testing the constitutionality of the wording of the prohibition amendment, as well as the right of the people of some fifteen states having referendum laws to approve or disapprove of the action of their legislatures in adopting resolutions ratifying the national prohibition proposal. Whether success or failure will attend this legal effort is a question of doubt at the present time, and yet it is not having a deterring effect on the interests that are concerned in saving their properties from destruction, as well as on a large number of people in the various communities who are opposed to the principle of depriving them by law of personal liberties granted by the federal constitution.

If the Supreme Court of the United States should decide that the right of referendum is applicable in the several states which have a referendum law, then the realization in the country of prohibition and the application of the national prohibition law would be delayed a year or two until all states which have in effect the referendum would have submitted the subject to the vote of their people. The referendum, therefore, if applicable, would delay prohibition under the Sheppard national prohibition amendment for possibly two years, or until such time as thirty-six states either through their legislatures or by referendum vote had ratified the national proposal.

Pruning and caring for wine grape vineyards. During the past three months many growers of wine grapes have written this department asking what they should do about earing for their vineyard properties tor another season. The question is a difficult one to answer and invariably we can only ask such growers to form their own conclusions after we give them a statement of facts. This board would not and could not give any sort of guarantee to the wine grape grower as to whether he could harvest his grapes next season and get a profitable price for them. If the manufacture of wine were permitted, we would not hesitate to say that all wine grape vineyards should be cared for with a certainty that the crop would bring a satisfactory price. If the manufacture of wine is prohibited the coming fall and the grape growers are not released by the demobilization proclamation we can not say how much of the crop could be disposed of for other purposes or what price would be paid.

Other uses for wine grapes. It is possible to make out of wine grapes unfermented grape juice and grape syrup. The manufacture of such articles has been in effect in a limited way in California for a great many years, but the products have not proven a success commercially to any considerable extent. Unfermented grape juice not to exceed 100,000 gallons during any season has been manufactured, but it is a small item as compared with the wine production out of the same character of grapes and there has not been a lucrative market at any time for California unfermented grape juice.

The making of grape syrup for table use has been confined almost exclusively to some of the households in the state and no one has attempted as yet to exploit this product commercially and in an extensive way. Such an enterprise might be undertaken, but if we should look to the disposition of all of our wine grapes in the finished form of syrup we would have to figure on disposing of some 20,000,000 gallons annually. It could not compete in point of cost of production as a sweetening power agent with either cane or beet sugar. Neither could it compete in point of cost of production with the ordinary corn syrup used in the household. It could be offered as a table syrup in com-

petition with such syrups as maple, and if the public readily accepted grape syrup as it does maple syrup there would be some opportunity to make it a commercial success in a limited way through publicity and educational campaigns.

This board has attempted with scientific advice and practical experiments to produce out of the wine grape an article that it could guarantee a commercial success, but it has not been able to reach a conclusion which would justify the statement that the wine grape crop of the state could be saved by other means than converting the raw material into wine. If at any time a discovery to the contrary should be made, either by its efforts or by the efforts of others, the information will be promptly conveyed to the general public.

The viticultural commission, in co-operation with the viticultural division of the State University, has been conducting experiments with the idea of producing a commercial article from wine grapes which might be more readily salable than either the unfermented juice or grape syrup. The manufacture of unfermented grape juice is no secret. It has been made in California for many years, but up to the present time those engaged in the business have not done so extensively because there has been no great demand for the unfermented California article. It is also known that syrup can be made from grapes, but up to the present time nothing extensive in a commercial way has been undertaken in the production of grape syrup. There are some who believe that the idea is fraught with great possibilities, and this remains to be seen.

This board looked with favor on the idea of producing a product from grape juice which might afterward be converted into either unfermented grape juice or grape syrup, and it authorized, in co-operation with the university, a work of experimentation in the northern part of the state. It was sought to produce an unfermented juice in powdered form, and after experiments lasting several weeks the work was dropped because it was agreed to be a commercial failure. The grape juice in powdered form was produced, but the powder melted and adhered to the walls of the retort, compelling those who were experimenting to come to the conclusion that such production was out of the · question. Work in a similar direction is now going on looking to the production of an anhydrous (water-free) molten syrup which could be run into barrels and sealed. The alternative in the way of dehydrated juice would be a product made in a continuous vacuum evaporator. Tests along this line are also to be made and if any of them should prove to be successful the results will be announced to the public.

Many growers of wine grapes, with the hope of saving their vineyards in the event of complete prohibition, are looking to the possibilities of artificially drying wine grapes in sections of the state where drying by natural, or sun, process is out of the question because of climatic conditions. This board is fully investigating the artificial drying plants of several people who claim to be possessed of improved methods, and whatever is obtained in the way of information will be given to the public in a later bulletin on this special subject.

OHANEZ (ALMERIA) AND BLACK ZANTE PLANTINGS.

Over a year ago we distributed to twelve hundred applicants scattered in almost every section of the state cuttings of the Ohanez (Almeria) table grape and the Black Zante currant. At the time we gave explicit planting directions, but explained to those who applied that there were probably many sections of the state in which either or both varieties could not be cultivated successfully. We desired, however, a practical as well as an extensive experiment.

Last fall we sent printed forms to all of the applicants asking information in relation to the plantings. In many instances failures were reported, but in a larger number of instances the cuttings took root, threw out canes and gave evidence of considerable thrift. We sent to each person experimenting directions in relation to pruning these new vines and we intend to follow this experimental work along through a succession of years, at the end of which time we shall know in a definite way what sections of the state are suitable to the cultivation of these two comparatively new varieties of grapes.

DRY WINE PRODUCTION FOR 1918.

The dry wine production in California during the 1918 vintage season was 25,000,000 gallons, which is equal to a normal production.

Of this production there was a falling off of the usual or normal amount produced in the sections of the state primarily known as dry wine sections, but the average was more than made up by an unusual production in some of the sweet wine sections.

Nineteen million gallons of dry wine were made in the counties of Mendocino, Napa, Sonoma, Contra Costa, Santa Clara, Santa Cruz, Sacramento, Solano, San Joaquin, Fresno, Alameda and San Francisco.

Six million gallons of dry wine were manufactured in San Bernardino, Los Angeles and San Diego counties in southern California.

This total production of 25,000,000 gallons called for the use of nearly 170,000 tons of grapes.

On a basis of \$35 per ton this tonnage of grapes made into dry wine brought the growers \$5,950,000.

SWEET WINE PRODUCTION IN 1918.

The sweet wine production in the state fell off from a normal of 18,000,000 gallons to 4,168,240.63 gallons of all varieties.

The production by counties and varieties is as follows:

County	Port, gallons	Sherry, gallons	Angelica, gallons	Muscat, gallons	Tokay, gallons
Fresno Kings	629,941.60	362,595.96 52,370.59	286,402.04	61,988.95 87,943,23	26,006.05
Los Angeles	28,853.91	43,324,86	6.653.73	7,761.61	
Madera	71,597.79	92,976,30	31,472,29	.,,	
Merced	106,776.13	106,576,38			
Sacramento	98,918.67	141,783,01			
San Bernardino	212,232.41	76,258.93			
San Joaquin	728,247.13	706,086.63	94,926,95	21,812.19	
Sonoma			3,430.57	2,793,73	
Tulare	50,569.2 6		16,826.39	11,411.34	
Totals	1,927,136.90	1,581,972.66	439,711.97	193,413.05	26,006.05

Port	Gallons
Sherry	1,581,972.66
Angelica	439,711.97
Muscat	193,413.05
Tokay	26,003.65
Modest .	
Total	4.168.240.63

This total production of sweet wine for 1918 meant the use of 55,570 tons of grapes, which at an estimated average price of \$25 per ton, brought the growers of the grapes \$1,339,250.

Six thousand cars of wine grapes shipped out of the state meant 90,000 tons of grapes, and at an average selling price of \$30 per ton at the shipping point brought the growers \$2,700,000.

The total returns to the wine grapegrowers of the state for the vintage of 1918 for the grapes loaded at the shipping points was \$10,039,250.

The estimated prices per ton received are conservative and probably low. It will thus be seen that the production of wine grapes in the state in 1918 was 315,570 tons.

BRANDY PRODUCTION.

The production of brandy in the state from the vintage of 1918 up to January 1, 1919, was in the neighborhood of 1,000,000 proof gallons, but it is not a factor in the estimate of the value of the wine crop because practically all of it was made for fortification of sweet wines and used immediately in the manufacture of the sweet wines.

It should be stated in connection with the wine data that the price of wines advanced in proportion to the price of grapes, and this was due to a healthy demand at all times for both the sweet and the dry wines

of this state. The price realized at the present time for these wines is higher than was ever known before in the history of the state. Limited production, shortage of old stocks almost to depletion and an unusual demand on the part of the public, the falling off of imports and the stimulation of exports were the factors in bringing about high prices for all wines.

Tax returns on 1918 vintage. The government tax in the production and in the sale of the 1918 vintage of wine would amount at the present tax rates to approximately \$3,140,000. That portion of the production which yet remains unsold and which is subject to taxation at the double rates of the new revenue bill would increase the aggregate tax money collected by the government approximately \$1,500,000 for one season's production of California wine.

FEDERAL INCOME TAX AS RELATING TO WINE GRAPE VINEYARDS AND WINERIES.

It will be of interest to wine grape growers and to owners of wineries to know that the new revenue bill will take into consideration the possible depletion feature connected with losses that may have been sustained by such persons by reason of the effect of federal prohibition. This very subject was taken up with the government by this board and the revenue bill contains amortization and obsolescence features which are presumed to apply to properties affected by the war or by national legislation. Ordinarily in the income and excess profits reports a normal depreciation charge only is allowed, but the new revenue bill takes into account the possible complete destruction of property within the year and one of the interests that will be concerned is viticulture in California, and, to a small extent, in other portions of the United States.

It would appear from the new legislation on the subject that the wine grape vineyardist and the owner of a winery would have the privilege of a reasonable amortization charge against his investment in improvements, such as buildings, machinery and vineyards for the year 1918 and a similar charge against the same property when he makes his report for the year 1919, providing, of course, it is demonstrated that federal prohibition has caused the complete destruction of his investment.

The particular portion of the revenue bill which would indicate that this special calculation is permissible is as follows:

Art. 160. Loss on inventory by obsolescence or damage. No deductions from the inventory value of merchandise or material will be allowed except in cases in which the inventory includes goods or materials which by reason of obsolescence or damage are unsalable. When such deduction is claimed the facts connected

therewith, including a statement of the cost of the goods, the value at which they were inventoried, and their present condition, must be filed with the return.

Art. 178. Obsolescence deductible, cost less depreciation and salvage. Amounts representing losses on account of obsolescence of physical property may be included as a deduction from gross income as a loss, provided such amounts have been recorded in the books following the condemnation and withdrawal from use of the obsolete property. The amount of obsolescence that may be claimed as a deduction shall be ascertained by deducting from the cost of the property the total amount that has been previously claimed and deducted on account of the depreciation of the property, plus the residual value at time of obsolescence, or plus the amount received for the sale of the property. The obsolescence deduction must not include the accumulated depreciation applicable to prior years.

Art. 179. Obsolescence when no depreciation is deducted. If no depreciation has been charged off against such property and deducted from gross income of prior years, the amount allowable as a deduction for the year in which the property becomes obsolete shall be ascertained by deducting from the cost of the property its residual value plus an amount equal to the depreciation actually sustained during the prior period and which might have been deducted when computed at the rate applicable to the same or similar property. The amount of depreciation thus arrived at as applicable to former years may be made the basis of amended returns and a claim for the refund of taxes overpaid by reason of the fact that no depreciation deduction was claimed in those years.

RAISIN PRODUCTION IN 1918.

The production in the state segregated by varieties and by counties is given in the following tabulation:

Counties	Muscats, tons	Thomp- sons, tons	Sultanas, tons	Sundrles, tons	Total, tons
Fresno Kings Tulare Kern Madera Stanislaus	82,000 8,750 9,000 1,300 900	37,500 600 7,500 550 250 600	6,500 650 4,000 50 50	3,500 250 250	129,500 10,000 20,750 1,850 1,4*0 650
Yolo San Bernardino San Diego Jerced	275 250 25	1,250 300	500		1,250 300 778 250
Total tonnage	102,500	48,750	11,750	4,000	225 167,000

The prices realized by the growers of raisins on the basis set by the United States government of 5½ cents per pound for Muscats, 6½ cents

per pound for Thompson's Seedless, $6\frac{1}{2}$ cents per pound for Sultanas and an estimated price of $4\frac{1}{2}$ cents per pound for sundry raisins netted the growers an aggregate sum of \$19,743,750.

To arrive at the net profit of the growers of raisins there should be deducted from this aggregate figure the harvesting expense, the cost of drying and the care and cultivation of the vineyards. If untimely rains had not interfered with the raisin production and damaged a large quantity of the product the yield of raisins in California would probably have exceeded 180,000 tons.

The product was sold to good advantage and there was practically no competition from imports of raisins or currants.

TABLE GRAPE PRODUCTION.

Absolutely accurate figures as to the number of carloads of table grapes produced in California and sold as such are not obtainable. A systematic investigation at many shipping points and a thorough checking of carload shipments in the general offices of the Southern Pacific, Santa Fe and Western Pacific railroads discloses the fact that a total of 18,189 cars of grapes were loaded in refrigerator service for transportation out of the state. Of this total number it is estimated that 6,000 cars were wine grapes shipped and sold as such, leaving 12,189 carloads of table grapes sent out of the state. It is generally estimated that 1,000 cars of table grapes are consumed in California or sent out of the state in small express shipments; so, therefore, the most intelligent estimate we can make of the number of cars of table grapes produced in the state is 13,189 cars.

The estimated average price received by the grower for a carload of grapes packed and loaded at the shipping point is \$1,250. On this basis table grape growers received for their table grapes \$16,487,250.

From this total received for table grapes must be deducted the cost of harvesting the crop, the cost of the crates and the packing charges and the attendant expense in connection with the care of the vineyard.

The viticultural industry in the state in all three branches has, therefore, brought to the producers of the grapes the annual income of \$46,220,250 for the year 1918.

Respectfully submitted.

STATE BOARD OF VITICULTURAL COMMISSIONERS, C. J. Wetmore, President.

E. M. SHEEHAN, Secretary.

Possible Uses for Wine Grape Vineyards

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